

# Intended use

Your Black & Decker cordless drill/screwdriver has been designed for drilling in wood, metal and plastics as well as for screwdriving purposes. The VPX1222 cordless drill/ screwdriver has also been designed for drilling in soft masonry. This tool is intended for consumer use only.

# Safety instructions

#### General power tool safety warnings



Warning! Read all safety warnings and all instructions. Failure to follow all instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

- The term "power tool" in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.
- 1. Work area safety
- Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
- 2. Electrical safety
- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

- f. If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.
- 3. Personal safety
- a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b. Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards
- 4. Power tool use and care
- a. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b. Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

- d. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- 5. Battery tool use and care
- a. Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- b. Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- c. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- d. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- 6. Service
- a. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will make sure that the safety of the power tool is maintained.

#### Additional power tool safety warnings



**Warning!** Additional safety warnings for cordless drills and impact drills.

 Wear ear protectors with impact drills. Exposure to noise can cause hearing loss.

- Use auxiliary handles supplied with the tool. Loss of control can cause personal injury.
- Hold power tool by insulated gripping surfaces when performing an operation where the fastener may contact hidden wiring or its own cord. Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and shock the operator.
- Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- Before drilling holes or driving screws into walls, floors or ceilings, check for the location of wiring and pipes.
- This tool is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- The intended use is described in this instruction manual. The use of any accessory or attachment or performance of any operation with this tool other than those recommended in this instruction manual may present a risk of personal injury and/or damage to property.

#### Vibration

The declared vibration emission values stated in the technical data and the declaration of conformity have been measured in accordance with a standard test method provided by EN 60745 and may be used for comparing one tool with another. The declared vibration emission value may also be used in a preliminary assessment of exposure.

Warning! The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used. The vibration level may increase above the level stated.

When assessing vibration exposure to determine safety measures required by 2002/44/EC to protect persons regularly using power tools in employment, an estimation of vibration exposure should consider, the actual conditions of use and the way the tool is used, including taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time.

#### Labels on tools



**Warning!** To reduce the risk of injury, the user must read the instruction manual.

#### Additional safety instructions for batteries and chargers

#### Batteries

- Never attempt to open for any reason.
- Do not expose the battery to water.
- Do not expose the battery to heat.
- Do not store in locations where the temperature may exceed 40 °C.
- Charge only at ambient temperatures between 10 °C and 40 °C.
- Charge only using the charger provided with the tool.
- When disposing of batteries, follow the instructions given in the section "Protecting the environment".

#### Chargers

- Use your Black & Decker charger only to charge the battery with which it was supplied. Other batteries could burst, causing personal injury and damage.
- Never attempt to charge non-rechargeable batteries.
- Have defective cords replaced immediately.
- Do not expose the charger to water.
- Do not open the charger.
- Do not probe the charger.



The charger is intended for indoor use only.

Read the instruction manual before use.

The charger automatically shuts off if the ambient temperature becomes too high. As soon as the ambient temperature has cooled down, the charger will resume operating.



Charge only at ambient temperatures between 10 °C and 40 °C.

# Charging.

#### Electrical safety



This charger is double insulated; therefore no earth wire is required. Always check that the power supply corresponds to the voltage on the rating plate.

 If the supply cord is damaged, it must be replaced by the manufacturer or an authorised Black & Decker Service Centre in order to avoid a hazard.

# Features

- 1. Keyless chuck
- 2. Torque adjust collar (VPX1212)
- 3. Speed selector switch
- 4. Forward/reverse and lock-off button
- 5. Battery release button (on battery)
- 6. Battery compartment
- 7. Variable speed trigger switch
- 8. Torque adjust collar (VPX1222)

#### Fig. A

14. Low battery indicators

# Assembly

#### Installing the battery pack (fig. A)

Warning! Make sure that the lock-off button (4) is engaged to prevent accidental switch actuation before removing or installing a battery.

 Insert the metal terminal end of the battery pack (9) into the battery compartment (6) until you hear the lock click into place and the VPX<sup>TM</sup> logo shows through the window.

Warning! The battery will only fit one way, do not force it. If the battery does not fit, remove it and put it in the other way.

#### Removing the battery pack (fig A)

 Press the battery pack release button (5) and firmly pull the battery pack (9) out of the battery compartment (6).

#### Charging the batteries (fig. B)

Warning! Do not charge battery packs at ambient temperatures below 10 °C or above 40 °C. Note: The charger will not charge a battery pack if the cell temperature is below approximately 0° C or above 60° C. The battery pack should be left in the charger and the charger will begin to charge automatically when the cell temperature warms up or cools down.

- Plug in the charger (10) and switch on at the mains.
- Insert the battery pack (9) into the charger. Make sure that the battery pack is fully seated in the charger (10).
- The charging indicator (11) will flash continuously (slowly).
- Leave the battery to charge for at least 5 to 6 hours.
- The charge is complete when the charging indicator (11) lights continuously
- The charger and the battery pack can be left connected indefinitely with the LED illuminated. The LED will change to flashing (charging) state, as the charger occasionally "tops off" the battery charge.
- The charging indicator (11) will be lit as long as the battery pack is connected to the plugged-in charger.

 Charge discharged batteries within 1 week. Battery life will be greatly diminished if stored in a discharged state.

#### Charge indicators

If the charger detects a problem with a battery pack, the charge indicator (11) will flash at a fast rate.

- If this occurs, re-insert the battery pack (9).
- If the problem persists, put a different battery pack in the charger to determine if the charger is OK.
- If the new battery pack charges correctly, then the original battery pack is defective and should be returned to a service centre for recycling.
- If the new battery pack gives the same indication as the original, take the charger to be tested at an authorized service centre.

**Note:** It may take as long as fifteen minutes to determine that the pack is defective.

If the battery pack is too hot or too cold, the LED will alternately blink fast and slow, one flash at each speed and repeat.

#### Battery chargers - daisy chaining (fig. C)

Single and dual port chargers can be electrically connected in any order up to a maximum of 4 chargers. Each charger has a power-in cord (12) which plugs into the electrical outlet and a power-out cord (13) which plugs into the next charger.

To connect the chargers in a daisy chain:

- Plug the power-in cord (12) into an electrical outlet.
- Remove the power-in cord from the next charger and plug in the power-out cord (13) rom the charger that is now plugged into the outlet.
- Repeat this process for the remaining chargers.

Chargers that are daisy chained together operate independently as though each one was plugged into a separate outlet, therefore a battery can be removed from anywhere along the daisy chain without affecting the other chargers.

## Use

#### Switching on and off (fig. D and E)

- To switch the tool on, press the variable speed trigger switch (7).
- To switch the tool off, release the variable speed trigger switch (7).
- A forward/reverse control button (4) determines the direction of the tool and also serves as a lock off button.
- To select forward rotation, release the variable speed trigger switch (7) and move the forward/reverse control button (4) to the left, looking forward.
- To select reverse direction, move the forward/reverse control button (4) in the opposite direction.

- The centre position of the control button (4) locks the tool in the off position. Make sure that the variable speed trigger switch (7) is released before changing the position of the forward/reverse control button (4).
- If the tool does not turn on, check to see if one of the two VPX<sup>TM</sup> battery packs is depleted. See the section 'Battery LED indicators' below.

#### Battery LED indicators

This product is equipped with electronics which will shut-off the power when either battery pack is depleted. If the tool stops suddenly, one of battery packs may be depleted. An LED (14) on the back of the tool handle will indicate which battery pack is depleted.

In order to illuminate the indicator (14) squeeze the variable speed trigger switch (7). To insure optimal runtime, remove both battery packs and place in a charger. Two battery indicators are located on the back of the tool above the batteries. If battery power is depleted while using your appliance, you can determine which battery needs to be recharged.

To check battery status:

- Squeeze the trigger and observe which LED is illuminated.
- Remove the battery pack corresponding to the LED which is illuminated.

#### Torque control (fig. D and E)

Your tool is fitted with a 24 position collar (2 or 8) to select the operating mode and to set the torque for tightening screws. Large screws and hard workpiece materials require a higher torque setting than small screws and soft workpiece materials.

- For drilling in wood, metal and plastics, set the collar to the drilling position symbol.
- For screwdriving, set the collar to the desired setting. If you do not know the appropriate setting, proceed as follows:
- Set the collar to the lowest torque setting.
- Tighten the first screw.
- If the clutch ratchets before the desired result is achieved, increase the collar setting and continue tightening the screw. Repeat until you reach the correct setting. Use this setting for the remaining screws.

#### Hammer action (VPX1222 only)

Your drill has hammer action:

 For drilling in masonry, set the torque control collar to the **T** position.

#### High/low speed selector (fig. D and E)

The 2-speed feature of your drill allows for greater versatility.

- To select the low speed, high torque setting (position 1), turn the tool off and allow it to stop. Move the speed selector switch (3) towards the back.
- To select the high speed, low torque setting (position 2), turn the tool off and allow it to stop. Move the speed selector switch (3) towards the front.

**Warning!** Do not move the speed selector button with the tool switched on.

#### Keyless chuck (fig. E)

To insert a drill bit or other accessory:

- Hold the chuck (1) and rotate it in a counter clockwise direction, as viewed from the chuck end.
- Insert the bit or other accessory fully into the chuck, and tighten securely by rotating the chuck (1) in the clockwise direction.

Warning! Do not attempt to tighten drill bits (or any other accessory) by gripping the chuck and turning the tool on or damage to the chuck and personal injury may occur.

#### Driving screws

 When driving screws, the forward/reverse button (4) should be pushed to the left.

Move the forward/reverse button (4) pushed to the right for removing screws.

#### Drilling

- Use sharp drill bits only.
- Support and secure the work properly.
- Run the drill very slowly, using light pressure, until the hole is started.
- Apply pressure in a straight line with the bit. Use enough pressure to keep the bit biting but not so much as to stall the motor or deflect the bit.
- Hold the drill firmly with two hands to control its twisting action.
- Do not click the trigger of a stalled drill on and off in an attempt to start it. Damage to the drill can result.
- Minimize stalling on breakthrough by reducing pressure and drilling slowly through the last part of the hole.
- Keep the motor running while pulling the bit out of a drilled hole. This will help reduce jamming.
- With variable speed drills there is no need to centre punch the point to be drilled. Use a slow speed to start the hole and accelerate by squeezing the trigger harder when the hole is deep enough to drill without the bit skipping out. Operate at full speed after starting the bit.

#### Drilling wood

Holes in wood can be made with the same twist drill bits used for metal or with spade bits. These bits should be sharp and should be pulled out frequently when drilling to clear chips from the flutes of the drill.

#### Drilling in metal

Use a cutting lubricant when drilling metals. The exceptions are cast iron and brass which should be drilled dry. The cutting lubricants that work best are sulfurized cutting oil or lard oil.

#### Drilling in masonry (VPX1222 only)

Use carbide tipped masonry bits. Refer to the section "Drilling". Keep an even force on the drill but not so much that you crack the brittle material. A smooth, even flow of dust indicates the proper drilling rate.

# Maintenance

Your Black & Decker tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.

Your charger does not require any maintenance apart from regular cleaning.

Warning! Before performing any maintenance on the tool, remove the battery from the tool. Unplug the charger before cleaning it.

- Regularly clean the ventilation slots in your tool and charger using a soft brush or dry cloth.
- Regularly clean the motor housing using a damp cloth.
  Do not use any abrasive or solvent-based cleaner.
- Regularly open the chuck and tap it to remove any dust from the interior.

#### Mains plug replacement (U.K. & Ireland only)

If a new mains plug needs to be fitted:

- Safely dispose of the old plug.
- Connect the brown lead to the live terminal in the new plug.
- Connect the blue lead to the neutral terminal.

Warning! No connection is to be made to the earth terminal. Follow the fitting instructions supplied with good quality plugs. Recommended fuse: 5 A.

# Protecting the environment

Separate collection. This product must not be disposed of with normal household waste.

Should you find one day that your Black & Decker product needs replacement, or if it is of no further use to you, do not dispose of it with household waste. Make this product available for separate collection.



Separate collection of used products and packaging allows materials to be recycled and used again. Reuse of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by the retailer when you purchase a new product.

Black & Decker provides a facility for the collection and recycling of Black & Decker products once they have reached the end of their working life. To take advantage of this service please return your product to any authorised repair agent who will collect them on our behalf.

You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our after-sales service and contacts are available on the Internet at: www.2helpU.com.

#### Batteries



Black & Decker batteries can be recharged many times. At the end of their useful life, discard batteries with due care for our environment:

- Run the battery down completely, then remove it from the tool.
- Lithium lon batteries are recyclable. Take them to any authorised repair agent or a local recycling station.

#### Technical data VPX1212 VPX1222 Voltage Vdc 14 14 Output torque Nm 23 23 (max) No load speed rpm 0-350 0-350 0-1200 0-1200 Max drilling capacity Steel mm 10 10 Concrete mm N/A 10 Wood mm 25 25 1 47 Weiaht ka 1.4 Charger type dual port dual port type 2 VPX<sup>™</sup> 2 VPX<sup>TM</sup> Batterv battery packs battery packs

# EC declaration of conformity

VPX1212 VPX1222

Black & Decker declares that these products conform to: 98/37/EC, EN 60745

Level of sound pressure according to EN 60745: Sound pressure (L<sub>pA</sub>) 69.86 dB(A), uncertainty (K) 3 dB(A) Acoustic power (L<sub>WA</sub>) 80.86 dB(A), uncertainty (K) 3 dB(A)

Vibration total values (triax vector sum) according to EN 60745: Screwdriving without impact  $(a_h)$ = 0.869 m/s<sup>2</sup>, uncertainty (*K*) = 1.5 m/s<sup>2</sup> Drilling into Metal  $(a_h)$ = 0.628 m/s<sup>2</sup>, uncertainty (*K*) = 1.5 m/s<sup>2</sup> Impact drilling into concrete  $(a_h)$ = 6.642 m/s<sup>2</sup>, uncertainty (*K*) = 1.5 m/s<sup>2</sup>

The undersigned is responsible for compilation of the technical file and makes this declaration on behalf of Black & Decker

Kevin Hewitt Director of Consumer Engineering Spennymoor, County Durham DL16 6JG, United Kinadom 14-10-2007

# Guarantee

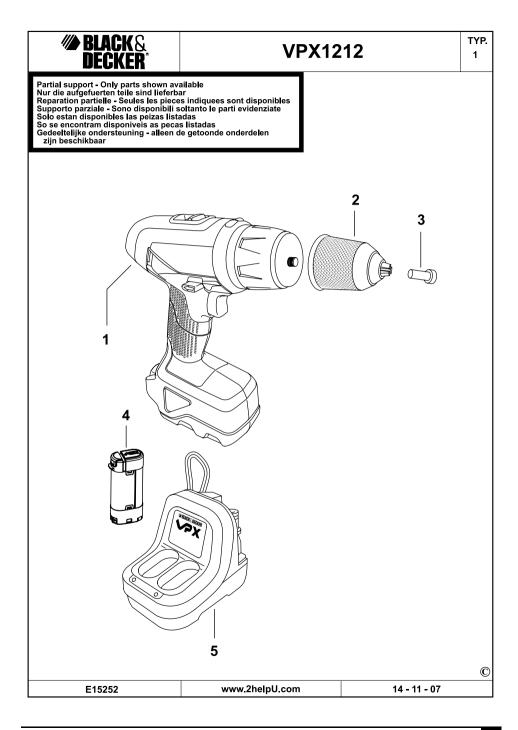
Black & Decker is confident of the quality of its products and offers an outstanding guarantee. This guarantee statement is in addition to and in no way prejudices your statutory rights. The guarantee is valid within the territories of the Member States of the European Union and the European Free Trade Area.

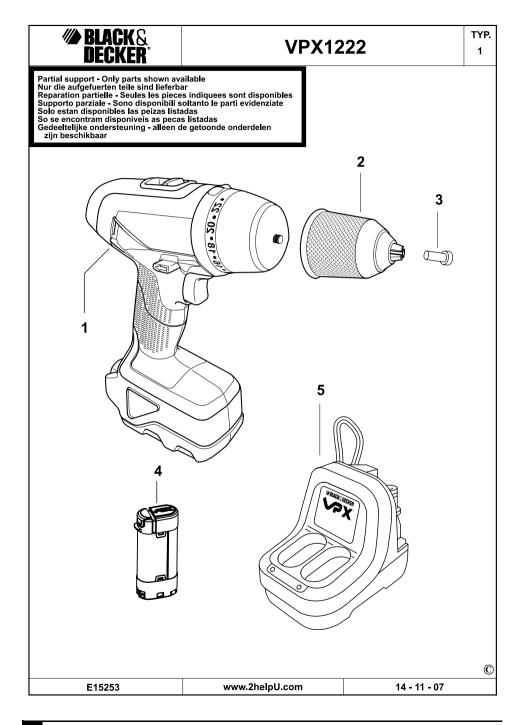
If a Black & Decker product becomes defective due to faulty materials, workmanship or lack of conformity, within 24 months from the date of purchase, Black & Decker guarantees to replace defective parts, repair products subjected to fair wear and tear or replace such products to make sure of the minimum inconvenience to the customer unless:

- The product has been used for trade, professional or hire purposes.
- The product has been subjected to misuse or neglect.
- The product has sustained damage through foreign objects, substances or accidents.
- Repairs have been attempted by persons other than authorised repair agents or Black & Decker service staff.

To claim on the guarantee, you will need to submit proof of purchase to the seller or an authorised repair agent. You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our aftersales service and contacts are available on the Internet at: www.2helpU.com

Please visit our website www.blackanddecker.co.uk to register your new Black & Decker product and to be kept up to date on new products and special offers. Further information on the Black & Decker brand and our range of products is available at www.blackanddecker.co.uk.





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